



ALEX DAVID PRATT

AI DEMYSTIFIED

UNTANGLING THE COMPLEXITIES SHROUDING ARTIFICIAL INTELLIGENCE

AI DEMYSTIFIED

UNTANGLING THE COMPLEXITIES SHROUDING ARTIFICIAL
INTELLIGENCE.

Alex David Pratt

AI DEMYSTIFIED

Copyright © 2024 by Alex David Pratt

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission from the author.

Published in The Gambia by The Scribe Press

DEDICATION

This book is dedicated to all true lovers of technology and every AI tool out there.

TABLE OF CONTENT

FOREWORD.....	13
INTRODUCTION	15
CHAPTER ONE.....	17
WHAT IS AI?.....	17
TYPES OF AI.....	23
Weak AI.....	23
Strong AI	23
STAGES OF AI.....	24
Ruled-Based AI.....	24
Context-Based AI	25
Expert System AI.....	25
Reasoning AI	26
DATA	26
MACHINE LEARNING	26
CHAPTER TWO.....	28
WHY AI?.....	28
ADVANTAGES OF AI.....	28
MULTITASKING	28
SPEED	29
DILIGENCE	29
AI VS MAN.....	30
DISADVANTAGES OF AI	30
Misinformation	30
Mental Dullness	31
Corruption.....	31
Bias	31
APPLICATIONS OF AI	32
BUSINESS	32
HEALTH	33

EDUCATION	33
SPORTS.....	34
GAMING	34
IT.....	34
TRANSPORTATION.....	35
COMMUNICATION.....	35
RELIGION	35
WORK	36
SKILL SETS THAT ARE LONG LOST TO AI	36
Writing.....	36
Art Design.....	37
Financial analysis.....	37
Language Translation	37
Data Entry	37
Image and Video Editing	38
Scheduling	38
AI: FRIEND OF FOE?	38
CHAPTER THREE	41
WHEN AI?	41
PAST OF AI	41
PRESENT OF AI.....	43
ChatGPT	44
Gemini	44
Bard.....	44
Grok	44
Imagine	45
FUTURE OF AI	45
KINDS OF AI.....	46
Reactive Machines.....	46
Limited memory ai.....	46
Theory of Mind AI.....	47
Self Aware AI	47
LEVELS OF ARTIFICIAL INTELLIGENCE.....	47

Artificial General Intelligence	47
Artificial Super Intelligence.....	48
CHAPTER FOUR	51
HOW AI?.....	51
Automated Document Processing	51
Dynamic Fraud Detection Systems.....	52
Smart Supply Chain Management	52
Augmented Creativity in Content Creation	52
Accelerated Product Development	52
AI in Media and Entertainment.....	53
Intelligent Code Generation Assistance.....	53
Automated Report Generation	53
Conversational Search Interfaces.....	53
Elevated Customer Experiences with Chatbots	54
Sell AI Art Prompts	54
Sell AI Stock Photos.....	54
Sell AI Print On Demand Photos	55
AI Content Creation.....	55
AI Music	55
AI Video	55
AI Coding	56
MUST-KNOW AI TOOLS	56
CONTENT CREATION	56
Copy.AI	56
Notion.ai	57
Rytr	57
Jasper	57
DESIGN AND VISUALS	57
MyEdit	57
Synthesia.....	57
Lumen5	57
Canva	58
PRODUCTIVITY AND ORGANIZATION.....	58

Descript.....	58
Todoist	58
Evernote	58
Calendly	58
Bard.....	59
MUST-HAVE AI SKILLS	59
1. Prompt Engineering.....	59
2. GenAI:	59
3. LLM Building:.....	60
Data Science	60
5. AI Innovation:	60
BEST COURSES TO LEARN ABOUT AI.....	61
1. AI for Everyone	61
2. Artificial Intelligence Nanodegree	61
3. Computer Science for Artificial Intelligence.....	61
4. Deep Learning Specialization.....	61
5. Self-Driving Cars - Duckietown.....	61
6. NLP Specialization	61
7. Artificial Intelligence.....	61
ADDITIONAL PLATFORMS TO LEARN ABOUT AI	61
1. Google AI (ai.google/education):	61
2. IBM Skills (ibm.com/training):	62
3. TensorFlow Tutorials (tensorflow.org/tutorials):.....	62
4. PyTorch Tutorials (pytorch.org/tutorials):.....	62
5. Udacity (udacity.com):	62
6. Codecademy (codecademy.com):.....	62
7. Kaggle (kaggle.com):	62
8. Fast.ai (fast.ai):	62
9. LinkedIn Learning (linkedin.com/learning):	62
10. DataCamp (datacamp.com):	62
BONUS.....	63
• Prompt Engineering Basics:	63
• ChatGPT Prompts Mastery:.....	63
• Intro to Generative AI:	63

• AI Introduction by Harvard:	63
• Microsoft GenAI Basics:	63
• Prompt Engineering Pro:	63
• Google's Ethical AI:	63
• Harvard Machine Learning:.....	63
• LangChain App Developer:	63
• Bing Chat Applications:	63
• Generative AI by Microsoft:.....	64
• Amazon's AI Strategy:.....	64
• GenAI for Everyone:	64
• AWS GenAI Foundation:	64
• OpenCV Bootcamp:	64
• Tensorflow Bootcamp:	64
GLOSSARY	64
REFERENCES	66
ABOUT THE AUTHOR	69

FOREWORD

This book is more than just a technical manual. It's an invitation to a grand ball, where robots waltz with algorithms, and the dance floor shimmers with the possibilities of a future sculpted by AI. You'll witness mundane tasks blossom into graceful automatons, freeing us to paint on the canvas of human potential with bolder strokes. Imagine surgeons, empowered by AI insights invisible to the human eye, performing miracles of healing. Or artists collaborating with digital muses to birth masterpieces never before dreamed of.

But, as with any potent potion, AI demands responsible consumption. This book unflinchingly confronts the shadows that dance at the edge of progress. It exposes the dark alleys of deep fakes, the slippery slopes of automation, and the ever-present question: what happens when the spark of intelligence becomes an uncontrollable inferno?

"AI Demystified" is a clarion call, not a lullaby. It's a reminder that the future of AI is not written in lines of code, but in the choices we make today. With each mindful step, each responsible decision, we weave a tapestry of progress, ensuring that AI is not merely a force to witness, but a co-pilot in the grand adventure of humanity.

So, turn the page, dear reader, and let Alex David Pratt guide you through the maze of misconceptions. Embrace the spark, for within it lies the power to illuminate, to empower, and to shape a future as boundless as the human imagination itself.

Bard.

INTRODUCTION

"AI is here to complete and not to compete with human intelligence"

– Alex David Pratt

Artificial Intelligence or AI in short is a buzzword that has clocked a staggering search volume of over 600,000.

Artificial Intelligence or AI is a hot trend in the digital space, majorly because of ChatGPT and other mind-blowing A.I. algorithms that have gone viral recently. ChatGPT is a natural language processing software that generates sensible output based on the prompt you provide it.

As fascinating as ChatGPT is, you'd be amazed to discover that it is just an inferior iteration of an even more mind-boggling phenomenon. Beyond natural language processing, AI retains the future of medicine, law and even religion.

Why is such a humungous amount of people interested in a topic? Well, quite simply because 400 out of the Fortune 500 companies utilize this fascinating technology to handle a spate of their tasks.

The global AI market is expected to reach a stupefying 1.81 trillion by 2030 and is predicted to increase by a CAGR of 38.1%

The exceptional rate at which it is advancing makes it a subject that everyone needs to be enlightened about if they are to remain relevant and thrive in this fast-paced digital age.

A good number of people have heard about AI but hold many negative notions about what it is. To some AI is a robot or a single company's product, but what is it? In this short but riveting piece, I will be defining all the essential terms you need to be informed about as it regards Artificial Intelligence.

In this comprehensive piece, we will be journeying from the very birth of AI in the Dartmouth College campus to its incredible future. We will be looking at all that AI could possibly become with time and how that will impact human life.

After reading this book, you will have gained a deeper understanding of what AI is and what it holds in store for mankind. Apart from granting you an understanding of the many benefits and advantages of AI, I will also be showing you how you can utilize it to your advantage.

It is not enough for you to just be aware of the concept of Artificial Intelligence and how it will significantly improve the human race, beyond this; you need to know how exactly it can be of help to you.

As you read this book, do understand that not all of the content reflects my opinion nor do I support some of the negative implications AI may have on humanity.

My interest is to simply enlighten the audience on the implications both positive and negative so that prudent decisions can be made to regulate this intriguing but dangerous innovation.

CHAPTER ONE

WHAT IS AI?

“In the end, intelligence will become so much more artificial than it is biological.” – Alex David Pratt

AI as a compound word may seem a bit hard to define. Of course, it entails the study of intelligent agents (machines capable of perceiving their environment and taking actions to maximize the chances they have to achieve their goals); it is so broad that it probes into the realms of philosophy, psychology, sociology, biology, neuroscience and even spirituality. The abbreviation AI stands for "*Artificial Intelligence*" and to some extent the name is self-explanatory but I will expatiate on what it entails. Firstly, I'd like to take a keen look at the word '*Intelligence*', for though it is the second word, it is the keyword in the abbreviation.

Intelligence could simply refer to the ability to think or reason that is akin to humans and this also encompasses the capacity to learn, solve problems, comprehend and perceive relationships. Intelligence also means to be able to grasp information, relate it with other information, understand it and manipulate it in different ways. To further understand what intelligence is, we need to study mankind, who is the epitome of it.

Humans are the most intelligent beings in the universe (this is as much as we know for now) and there are several reasons why we deem them so; a few of them include their ability to reason (think critically and analytically to make an informed decision). Our learning abilities and advanced problem-solving skills as

humans are other cognitive powers that make us the apex creatures in existence.

Even our capability to understand ourselves, relate with others and interact with our surroundings through our senses are results of intelligence. Intelligence is ability; it is the potential to do a wide variety of things; if someone can easily tell apart different musical notes, we say he is musically intelligent because He has knowledge and understanding of that realm.

Human intelligence is multifaceted and multi-dimensional different categories of intelligence are attributed to men. A few of them include are: linguistic intelligence (understanding information in a spoken or written language and giving meaningful responses, creative intelligence (bearing the ability to come up with new ideas), and spatial intelligence (being able to perceive space, comprehend distance and location). The list goes on and on about the many unique mental abilities that men possess.

Beyond the mere capability of thought, intelligence also entails being able to think reasonably and act rationally. Being truly intelligent means being able to think right and act right as a result it is not limited to you just thinking alone.

Having gained an understanding of what intelligence is, let's move to defining the word "*Artificial*". Saying something is artificial is saying that it is unoriginal. It also denotes that it is unreal and contrived. Juxtaposing the words artificial and intelligence makes it plain that AI is intelligence that is unoriginal but that doesn't mean it is unreal.

Artificial Intelligence can be defined in many ways but I'd like to define it as **the simulation of abilities typically attributed to humans, by machines**. It can be explained in terms of machines mimicking human cognitive abilities, rational thinking or action. It is the imitation of human intellect or behaviour by machines. To

simulate simply means to model or imitate something and in this case it is when machines reproduce abilities (mostly cognitive) that were originally exclusively human. Apart from mimicking intellectual capabilities AI can also be considered the as the imitation of perceptual, emotional and social qualities that are predominantly ascribed to humans alone. Artificial intelligence is termed so for a reason, saying something is artificial already means it is not original, it proposes that it is a replication of something and that is exactly what AI is. It is when devices display intellect that only humans are supposed to be able to do.

For instance, I spoke about linguistic intelligence which is what powers most of our communication, i.e., our ability to grasp written or spoken language. This can easily be replicated by machines through Natural Language Processing and other human cognitive abilities (our ability to assimilate and manipulate new information) can also be contrived by machines through knowledge representation and automated reasoning.

AI can possess a goal and discover ways to go about accomplishing it just as any human would, only that, the process it would take to reach a goal will be purely based on data analysis and mathematical methods rather than the common sense or natural practical judgment a human would employ to achieving it. AI only simulates it doesn't have intelligence as a human does.

AI can simulate certain kinds of intelligence quite remarkably but there are dimensions of intelligence it cannot even attempt to replicate. Creativity for example is one of the unique intelligences of man that computers are yet to demonstrate because creativity deals with coming up with new patterns of thoughts. You may argue that ChatGPT or other generative AI seem to be capable of coming up with songs, text and images when prompted but the

truth of the matter is that, generative AI only studies patterns from the data you provide it and spawns mathematical variations of it, so in reality AI doesn't create (comes up with something completely new).

Another distinct human trait that machines will never be able to possess is emotional intelligence which stems from interpersonal and intrapersonal knowledge. For computers to generate emotions, they must be self-aware and must have personal goals, interests and desires. This is quite impossible today because scientists are still grappling with comprehending what the consciousness (seat of personality) is much less simulating it. The more interpersonal an intelligence is, the harder it is for AI to imitate. This reminds me of the imitation game, which I will talk about later on.

Computers are far away from becoming sentient (knowing and becoming conscious themselves) but they can in a sense know others. Alan Turing, a notable name in the AI arena conducted several tests which assess computer intelligence depending on whether a human can tell a computer apart from a person. The first of these two tests is

Have you ever supplied a computer with information and it responded to you in a manner so accurate that you felt like it was human? Yes, this may have happened to you before, especially if you interacted with many of the AI Chatbots available online. However, the mere fact that they provide intelligible responses doesn't mean they possess any level of intellect because they may have merely been programmed to recognize a particular sentence syntax and prove a specific response to it, this does not mean that the computer grasps the message being related to it. Although these sensible responses make it look like they do understand human thoughts and feelings, the opposite is true because computers simply cross-reference terms in a lookup table when

certain keywords are used and act on the algorithm contained in the table to give a suitable response in a very mathematical rather than interpersonal fashion.

To prove this point, an AI thought leader, conducts an experiment where a person is locked in a room and provided with a library of rules and lookup tables in Chinese. If the person inside receives a note in Chinese from someone outside; he can easily search for the characters on the note from the dictionaries in the room and decipher what the person is trying to communicate but that does not mean he understands the Chinese language.

Merely knowing something doesn't mean you understand which equates to intelligence. True intelligence is in understanding and ability. This poses a question, is an AI computer able to think, grasp and understand the concepts that are fed to it? All AI has is a predefined set of rules that tells it how to respond in every case; coupled with the ability to learn it can now also learn from various instances just like a human would. As children growing up, we learn from our mistakes, and successes. We do good and we are rewarded then we automatically know that the actions we took are to be repeated shortly if we want to have such rewards again; we do something bad and get a beating; that helps us to know that such is not something to do again.

For AI to compete with human intelligence it needs to replicate the same processes of human intelligence, however, that's not the case. In contrast, AI demonstrates intelligence yet uses other means to reach an end and that is why it is not intelligent to the human level.

Although certain machine intelligences can parallel certain human intelligences how they function is quite antithetical. Computer vision can be an easy mechanical rival to visual

intelligence or robotics an alternative to human psychomotor intelligence but the dynamics behind a human's kinaesthetic prowess entails recondite abilities such as reflexes that are beyond the reach of AI imitation.

Humans identify a goal; they want to achieve something, then they go all out into seeking ways that are attainable and then learn from the failure or success of attaining that goal to either make another approach or otherwise improve upon the previous ones.

These processes can be simulated but they are not an exact copy. The major difference between AI and human intelligence is in the processes they use to function. Artificial Intelligence uses more logical and mathematical modes of operation, learning patterns and utilizing that knowledge to extrapolate.

Human intelligence on the other hand is far more sophisticated especially because of the myriad neural networks that it functions upon. The way the human brain works is so complex to the point that opportunities and even novel ideas or ways things can work are just mere connections we realize between disparate objects. Psychologists and neuroscientists are still yet to fully understand how the brain works much less replicate it in a computer system.

Contrary to popular opinion, AI is not a robot! When some people think about AI, they just envision a Terminator-like entity, or others think of fictional characters such as iRobot, etc. Although, robots could be powered by AI; that is not really what they are. Robotics mainly AI to simulate human proprioception; nonetheless, these two disciplines are quite distinguishable.

AI is not a single company's product! Some people have limited their definition of what AI is to Apple's Siri, Amazon's Alexa or OpenAI's ChatGPT, now while these are all AI technologies, they are merely one wave of AI and not all that it is.

AI DEMYSTIFIED

Siri, Alexa, and Cortana are virtual assistants that fall under the category of AI. They are customized search engines and digital assistants that help users easily find certain pieces of information they are looking for and further help to perform tasks as simple as turning on a light bulb to tasks as sophisticated as finding the nearest restaurant that sells tacos.

AI can be categorized in different ways, there are different types, stages, kinds and levels of AI. I'll talk about the types and stages of AI and then talk about the kinds and levels of AI in subsequent chapters.

TYPES OF AI

WEAK AI

Narrow AI or weak AI is specially trained to perform a particular task and solve a specific problem. It may also be termed an expert system, that gains mastery in a particular domain. As the name implies, the task that this AI is designed to perform is narrowed down to just a single thing or two. Siri, Alexa and Cortana are good examples of this, they're good at just one thing and that is all they focus on, helping you find relevant information. These iterations of AI applications were built on learning models that required human intervention to process new information or carry out any task that was beyond their initial training.

STRONG AI

Strong AI is capable of accomplishing a wide range of tasks and knows a variety of fields. Strong AI is still under development

and we may not fully see it anytime soon, it can also be termed Artificial General Intelligence and it utilises the knowledge it's attained from previous learning experiences to accomplish new tasks in contexts it hasn't encountered before. Weak AI cannot accomplish this without receiving further training in the underlying models through human intervention.

Strong AI will prove very useful in robotics since it greatly demands the ability to make decisions beyond its training as it explores the real world that is laden with miscellaneous environments. Kinaesthetic intelligence is one of the many intelligences advanced robotics will require because it has many moving parts and would need to know how to utilize them to perform different tasks but significant advancements are being made in this area, in fact, most recently an AI robot beat humans in a physical skills game.

STAGES OF AI

RULED-BASED AI

AI started in a rule-based form; i.e., it needed to be instructed on what to do for it to function effectively. This AI is a knowledge-based system; it makes decisions based on predefined rules and doesn't possess the ability to learn or adapt to unexpected situations and is therefore limited in its functionality. This stage of AI is readily found in technologies such as thermostats and alarm clocks; an alarm clock chimes at a particular time because it has been programmed to do so and a thermostat may turn on the air conditioner when the temperature is at a particular degree. Radios and microwaves also utilize rule-based AI technology.

AI DEMYSTIFIED

CONTEXT-BASED AI

This stage of AI doesn't just accept and process input it takes note of factors such as background data, environment, and real-time user behaviour to make decisions. Siri and Alexa fall in this category they can make wise suggestions based on your personal preferences that they've taken note of over time. They can remember every encounter with you and store it for future purposes. Google Discover uses context-based AI to recommend sites to you based on your browsing history. Context-based AI plays a major role in helping you tailor your experiences on the internet by only appealing to your interests.

EXPERT SYSTEM AI

This stage of AI deals with AI systems that are trained and taught to master specific fields and domains to the point that they can act in the stead of an expert in that field. For example, an expert system in the medical field may be able to prescribe drugs to you if you can explicitly describe your symptoms.

They're able to consume vast volumes of data and provide valuable insights that would take humans longer hours to study and uncover. AlphaGo is an example of such a system, only that it was created to master the board game Go.

The financial world maximizes such systems to monitor markets and predict stock movements with unbelievable accuracy. Real-time translation is another amazing ability this AI wields. Samsung's S24(the AI Phone) features this fascinating technology.

ALEX DAVID PRATT

REASONING AI

This stage of AI can simulate the composite processes of humans though. They can analyse information draw connections, spot errors and do some complex things that are only possible with human-level cognitive powers. They can even bring unseen or unobvious possibilities to light. ChatGPT can be said to be in this stage, it is a Large Language Model (LLM) that's built on training data from myriad websites. Autonomous driving cars are also said to be in this stage of AI.

DATA

AI is only as powerful as the amount of data that is used to train it. Just like how food nourishes and replenishes our bodies causing it to grow and develop, data is food to AI. In the same way that we do not eat raw food but have to prepare and process it well before it is edible, data has to be manicured before it is usable. Not all data is useful because not all data is truthful; hence data has to be trimmed and put into the right shape and mode for it to be useful. As I explained earlier, AI cannot create, so for it to give an output, it must first be supplied an input. If data is what AI feeds on to learn you may be wondering what process AI use to learn, I treat this right below.

MACHINE LEARNING

Machine Learning (ML) is the autonomous learning process of A. I. machines, refers to the process of them learning from data on their own accord. Usually, machines would need to be told what to do and rely on external input of data for them to enhance their

performance; such isn't the case with ML where the machines can improve their performance by recognizing patterns and making predictions. ML enables AI to gain intelligence from data and learn from each experience to detect new patterns that it could use to easily adapt to similar circumstances.

Machine learning has three major paradigms: there's supervised learning, unsupervised learning and reinforcement learning. The first as the name implies entails where an input object and desired output value are used to train a model in a monitored environment. Unsupervised learning is similar to supervised learning only that it is within an environment where the output values aren't provided, but it can infer some things by clustering. Reinforcement learning enables an AI model to learn through reinforcements (rewards or punishments).

Deep Learning is a kind of ML that copies the way your brain works. Just as countless neural networks in your brain are interconnected deep learning seeks to mimic this intricate architecture. AI based on deep learning will be able to make more accurate judgements and make realizations that would be much harder to discover through RL alone.

Deep learning empowers AI applications to learn how to execute jobs that will require human intelligence; this enables them to learn just like humans do to easily make decisions in new environments beyond their initial training.

Computers can generate content and automate tasks because of advancements in deep learning, however, certain aspects of this form of AI remain theoretical and under development. DeepMind is a Google AI research company that is doing an impressive job of exploring deep learning.

CHAPTER TWO

WHY AI?

“One who grasps the unfair advantage AI proffers man asks why not AI rather than why AI.” – Alex David Pratt

AI promises to help mankind in a large number of ways and the need for it is more apparent to some people than it is to others. AI has many advantages, and although it cannot measure up to the vastness of human intelligence certain aspects of it make it quite advantageous to us.

ADVANTAGES OF AI

MULTITASKING

One of the primary advantages of artificial intelligence (AI) lies in its exceptional multitasking capabilities. Unlike humans, AI systems can seamlessly handle multiple tasks simultaneously, processing diverse information concurrently. While humans struggle to efficiently juggle numerous activities, AI excels in parallel processing, enhancing productivity across various domains.

SPEED

Another distinctive advantage of AI is its unparalleled speed and computational prowess. Machines, driven by artificial intelligence, can perform complex calculations at a magnitude and speed far beyond human capabilities. Tasks that would take humans years to complete can be executed by AI systems within a matter of seconds, revolutionizing the efficiency and rapidity of problem-solving and data processing.

DILIGENCE

The diligence demonstrated by AI surpasses human capacity, as these systems can tirelessly work for extended periods without succumbing to fatigue. Unlike humans, AI maintains a consistent level of performance, allowing it to tackle demanding tasks consecutively and continually seek additional challenges. This unwavering diligence positions AI as an invaluable resource for handling labour-intensive and prolonged tasks with efficiency.

Aside from being diligent AI is also reliable. AI will not give you excuses, in fact, in writing this book, I had identified a person I wanted to do the foreword but they were unable to make it due to their hectic schedule so I just prompted Bard to do it for me and here we are!

ALEX DAVID PRATT

AI VS MAN

Although our AI rivals seem to have too many vantage points against us, let's not forget that our irreproducible inductive reasoning and perceptual abilities (generalization, stimulus, and abstractionism) are still a long distance away from AI simulation.

Not to mention, our unparalleled ability to adapt to circumstances we've never experienced before and our acute discernment and sensory functions.

AI and technology in general have rifted a chasm in humanity between those who are for technology and those who are against it. The former base their apathy for technology on the apparent plagues it has brought mankind in the past (Atomic Bomb) and conclude that tech means more harm for mankind than good.

,Below I share a few dangers and disadvantages associated with this technology.

DISADVANTAGES OF AI

MISINFORMATION

As generative AI continues to surface, people now have the power to create any kind of content they want whether it is real or fake. Deep fakes are a major concern for many, as more AI content is being generated how will we be able to tell what is original and what isn't? With AI One can easily create an image or video about someone that appears very real and spread false information or tarnish the person's image and it would be very hard to tell whether it's original or not. For this very reason, camera manufacturing companies such as Nikon, Canon and Sony are embedding digital signatures into their new cameras to help create

a distinction between AI-generated footage and original images. Furthermore, there's the innovation of AI watermarks too which are a mechanism to safeguard against the dangers of deep fakes which can essentially make people appear to do or say things they didn't say or do.

MENTAL DULLNESS

If we continue to rely on computers to do all of our work; we will become lazy and mentally dull. Nicholas Carr talks about this in his book entitled *The Shallows*. Designating all of our tasks to AI means we have little or no challenges for our mind to remain active and engaged; which will result in a drop in our cognitive abilities due to low activity. This is why regardless of how much you utilize AI always ensure you enhance your cognitive capabilities through reading or engaging in other mental activities that stretch your mind.

CORRUPTION

No matter how intelligent an AI is, it is still a piece of software that accepts input and gives you data based on your input. This makes it vulnerable to corruption, people can easily feed it with wrong information and cause a lot of harm as a result.

BIAS

Humans are biased, and since machines are trained on human data; this same negative tendency and flaw is unstoppably transmitted to them. Do you know that face recognition software from most AI from the largest vendors usually works better for

light-skinned faces? This was because the training data used to build this model was not diverse enough. The power of an AI model is not only in how much data is used to create it but also in how diverse that training data is. It is quite unfortunate that most data is bias.

The downsides of technology are undeniable and to some extent unavoidable, so it is with many other fields and domains, and to be frank, technology is an amoral tool that assumes the personality of its user. If utilized by a criminal it can be a very dangerous weapon but in the hands of the right people, it can bring great good to mankind.

On that note, I would like to talk about some of the several benefits AI has for mankind, I'll be showing us how exactly it will be of help to our communities, businesses, and work. Artificial Intelligence has crept into our lives in the form of helpline voices or conversational chatbots. Furthermore, they help us to generate images, process information and manipulate it in extraordinary ways. AI has several applications and below we'll explore a couple of them.

APPLICATIONS OF AI

BUSINESS

AI can study customer data and observe trends and patterns to guide managers to make better business decisions. Aside from granting business people an advantage by helping them understand customer preferences, AI is even redefining the operations and systems of most enterprises. Many entrepreneurs are leaning

AI DEMYSTIFIED

toward more digitalized modes of operation by building chatbots and leveraging augmented reality (AR) technology so that customers can try out their products. For example, companies like Amazon and Netflix use AI algorithms to analyse customer behaviour and provide personalized recommendations. Apart from studying data to give wise suggestions, AI can also contrive novel ideas altogether and get a majority of the work done.

HEALTH

Personalized health is the greatest possibility AI offers mankind. AI can study an individual's health reports and offer him/her a customized health experience. There are already health digital assistants that can run diagnoses and expert systems which can accurately prescribe drugs. For instance, IBM's Watson Health is an AI-powered platform that aids healthcare professionals in diagnosis and treatment decisions. Apart from diagnosis and drug prescription, AI is also helping to contrive new drugs altogether and it is discovering precious secrets about human biology that would have taken a century of research to uncover.

EDUCATION

Education can also become a more individualized experience with AI. AI can create customized lessons for an individual based on the best way they learn; if given enough data, it can even modify those lessons to fit the social context of that individual, making the content more relatable and consequently easily understandable. Sooner than later, we will see the rise of AI teachers who may be virtual personalities we interact with through

the Metaverse. EdTech platforms like Khan Academy use AI to personalize learning paths for students.

SPORTS

AI is widely used in sports, especially in the football arena, to tell whether players have made an offside or broken other rules that may occur too fast for human eyes to capture. AI also powers sports betting, and chatbots and virtual assistants are being created that respond to fans. Hawk-Eye technology, used in tennis and cricket, is an example of AI being employed to track ball trajectories and make accurate decisions.

GAMING

AI proves useful in gaming because, through it, virtual characters can be spawned. Characters whose spontaneous personalities add another layer of fun and excitement to gaming. No longer do characters in games have to be the same for every user; two different users may have varying characters depending on their preferences and personality types. Games like "The Sims" use AI to simulate characters with unique behaviours based on player interactions.

IT

Programming is a fun but relatively challenging task, especially when it comes to debugging. Despite this, AI has been able to relieve coders of the stress of debugging endless lines of code. Not only has it been able to aid programmers, but AI is also assisting IT personnel by reducing their workload to nothing more

than just inputting a few prompts and having their desired results. GitHub Copilot is a classic example of such a tool which helps coders complete their lines of code.

TRANSPORTATION

Sooner than later, manned vehicles will become nothing but history. AI is the key to breaking the FSD (Full-Self Driving) code. There are already working models of cars that can self-drive, although not to the level where they can be allowed to, but at least we are making a headway in building such technologies through the power of AI. . Companies like Tesla and Waymo are actively developing AI-powered autonomous vehicles.

COMMUNICATION

AI is helping us to communicate in ways we never imagined before. Through this breathtakingbreath-taking technology, we are even able to bridge the language gap; because through AI, we can now communicate almost fluently to people who speak an entirely different language from ours. For instance, the Samsung Galaxy S24 has a feature that directly translates one language to another.

RELIGION I am certain that you're surprised to find religion on this list, but you really shouldn't because AI is already affecting religion in a very unusual way. There are already countries where AI is leading congregations in their ritual acts of worship, conducting their prayer sessions and helping them recite their creeds. Even Hinduists are beginning to embrace AI and

ALEX DAVID PRATT

technology in general. Another way AI is influencing religion is by helping religious leaders prepare sermons and teachings. AI is not only helping other religions, but it is even of itself becoming a religion. Preposterous, right? How can a creator worship their creation? Quite idiotic, if you ask me!

WORK

If you've observed recently a lot of tech companies are laying off employees, Twitter, Twilio, LinkedIn, OpenAI, Spotify, the list goes on and on! The reason for this is simple; they're relying more on AI to accomplish some tasks that were carried out by men before. The World Economic Forum's Future of Jobs Report estimates that 44% of worker's skill sets will become obsolete in the next five years. I talk about a couple of them below. We live in an AI-dominated job market where work that was previously humanly executed is now being carried out by AI algorithms, hence creating a demand for workers skilled in AI applications. This calls for a shift in career goals to better align with the emerging technological workforce trend. You don't necessarily have to quit your job altogether and get into tech full-time; just look for a way to integrate AI into whatever you do.

SKILL SETS THAT ARE LONG LOST TO AI

WRITING

Producing reports, news articles and other content is now becoming a task best delegated to generative AI. Apart from generating content, most chatbots can even summarize lengthy texts, suggest additions you can make and enhance your writing.

AI DEMYSTIFIED

To add the cherry on top, you can create entire books and content you can monetize online.

ART DESIGN

Designing artwork manually is now old-school especially when AI can quickly generate high-definition images in relatively short periods.

FINANCIAL ANALYSIS

Financial data is complex to analyse but AI tools are making it a piece of cake by not only breaking it down but by also providing you with valuable insights on the best decisions you can make.

LANGUAGE TRANSLATION

With AI you no longer need to learn new languages the hard way because there are tools that can help you to translate from another language in real-time! These tools can translate not just text content but even audio, videos and images!

DATA ENTRY

AI can retrieve data from different sources and insert it into data fields without you typing a single thing. We all know how time-consuming inputting data into spreadsheets can be, but I have good news for you, it can all be automated with AI!

ALEX DAVID PRATT

IMAGE AND VIDEO EDITING

The skill I'm grateful for the most that AI has made obsolete is this one because I know just how frustrating editing videos and images can be, especially when the videos are very long and boring. Guess what, AI-powered tools can make all the necessary corrections and adjustments that need to be made on a picture or video. Manually removing backgrounds from an image is now a thing of the past, AI can help you do that in milliseconds and it will do so with greater accuracy.

SCHEDULING

Finding the right time to schedule meetings or carry out some tasks can be so difficult especially if you are very busy like me, but thanks to AI, we can now receive suggestions on the best times available from our calendars thereby reducing the risk of us selecting times we have already set appointments.

AI: FRIEND OF FOE?

As more jobs are being lost to the extensive use of AI in the marketplace, a concern arises about AI proliferating the workforce leaving many humans with employment. As more humans are fired from their jobs to AI, you might be discouraged about this and hate AI altogether because it may threaten to take your job, but do you know that AI is creating more new jobs than the ones it is taking away? So instead of complaining about the few jobs it is rendering obsolete why don't we acquire the necessary skills for the new jobs it creates and remain relevant? I find it quite silly for mankind to

still be carrying out some menial tasks in this day and age when some technologies can easily get it done for us. A certain service I used to manually provide a long while ago was transcribing. I'd listen to people's audio and type it down in words, now I don't need to spend countless hours and energy doing so when I can easily upload the audio to an AI software that can easily do so for me.

AI is here to help and upgrade humanity to a higher plain, we must embrace and leverage it to our advantage rather than hold myopic pessimistic views about it. Does AI have negative implications, undoubtedly, so does everything else! That doesn't stop us from using them it just makes us careful about certain decisions we make in utilizing them but it doesn't cause us to do away with them altogether.

If you've used AI before to get something done and it felt wrong, because perhaps you're thinking it's unethical to have it do work for you and you'll utilize it as though you created it, I have a remedy for you. A colleague of mine put it this way, if you're given a task and delegate, it to an assistant of yours and submit it as though you carried it out yourself do you feel like it was unethical? Certainly not! Of course, you may give credit to your assistant for getting the job done but it wouldn't make any difference if you didn't. Similarly, think of AI as a digital assistant ready to quickly help you out with a certain range of tasks.

Now do understand that AI is not here to replace your mind, please utilize your brain as much as you can to carry out things initially and use AI to enhance it. It is not wise to fully rely on AI to do everything for you.

I use AI a lot but I usually originally instigate the things I want to do and only use AI to amplify it. For example, AI can assist in

ALEX DAVID PRATT

proofreading or editing a lengthy piece of text that I've originally written or aid me with paraphrasing my writing or adding a few more lines to it but not do the entire thing for me, that's just laziness. I actually wrote this book myself, I could've easily generated it all with AI but that's not my philosophy, of course there are portions that I used AI to help me with enhancing but it didn't do the whole job for me.

There was a certain program I was undergoing that demanded a lot of work, what I did was I utilized AI to deliver my assignments fast enough but I always went through the documents we had to read when I was more chanced because I understand that if I entirely rely and depend on it, it would dampen my mental prowess. Don't depend so much on AI that you become lazy and can't even think for yourself!

CHAPTER THREE

WHEN AI?

“Mankind will not create Super Intelligence it will only discover it” -
Alex David Pratt

AI is more or less an intelligent computer system; so, to uncover the history of AI we must consider the history of the computer. Man has always sought to create intelligent tools; this dates as far back as when men invented idols; they made up objects they believed could speak to them and interact with them.

PAST OF AI

The first truly intelligent machine was a calculator; it demonstrated the mathematical intellectual prowess of man; being able to compute numbers punched into it, only that at that time, it was actually in the form of an abacus which has its roots in ancient Mesopotamia. The calculator could demonstrate the mathematical intelligence of man but it was unable to contrive the logical and more complex aspects of it. In 1500 Leonardo Da Vinci designed (but did not build) a mechanical calculator, and construction of it showed that it was quite functional. Willhelm Schickard and Blaise Pascal also built calculating machines, even though the latter is more popular. Gottfried Leibniz built his mechanical device too which surpassed the Pascaline, for it could add, subtract and multiply.

The calculator made men believe that if machines could calculate numbers, they may be able to do much more and these thoughts built the foundation for the creation of truly intelligent machines. The fact that the mind partly operates based on a set of logical rules was already proposed by Aristotle much before the invention of these machines and he postulated syllogisms which enabled one to generate conclusions mechanically when given initial premises. Philosophers like Ramon Lull also posited that useful reasoning could be carried out by mechanical artefacts.

In 1950, Alan Turing published a paper called "*Computing Machinery and Intelligence*" and thereby gave birth to this new field of computing that would later on be called AI. Although, it was not yet known as Artificial Intelligence, John McCarthy was the one who coined it 6 years after in the first academic conference held about it.

Mr. Turing's paper sought to answer one question, can machines think in it, he proposed tests that seek to ascertain whether the imitation of human sentient behaviour implied a computer is sentient. This he called the imitation game; it comprised of a man, a woman and an interrogator. The interrogator's task was to identify which of the participants was a man or woman.

Mr. Turing's test gave AI a solid foundation and his experiments remain relevant till today. In 1961, something spectacular happened at GM, an industrial robot (Unimate) replaced humans on the assembly line and four years after that, Eliza (Chatbot created by Joseph Weizenbaum) started holding conversations with humans. Another electronic personality appeared in the scene in 1966 called Shakey (general-purpose mobile robot), it was endowed with reasoning powers unheard of in the artificial intelligence scene.

Between 1966 and 1997, AI plunged into a terrible phase deemed the AI winter, where a lot of failed startups emerged as well as many other unsuccessful ventures that left AI out in the cold.

IBM was the saviour that heroically saved the AI space by building Deep Blue (chess-playing computer) which beat Gary Kasparov (world chess champion). This ground-breaking achievement in AI was succeeded by the creation of an emotionally intelligent robot called KISmet (built by Cynthia Breazeal) and this opened the gateway for many other such like domestic robots such as AiBO (Sony's pet dog robot) and Roomba (autonomous robotic vacuum cleaner).

2011 was the advent of AI virtual assistants, starting with Siri and Alexa in 2014. In between those years, it is also worth noting that IBM's question-answering computer (Watson) won first place in Jeopardy (a \$1M prize television quiz show) and Eugene Goostman (Chabot) passed the Turing test, deceiving a majority of his judges that is human.

2012 was also a year where breakthroughs were made in artificial neural networks which enabled machines to engage in reinforcement learning and simulate the way the brain functions.

Things went south in 2016 when Microsoft's Chabot TAY made derogatory comments online. However, this was soon forgotten when AlphaGo (Google's AI) defeated Ke Jie in the sophisticated board game Go in 2017.

PRESENT OF AI

The history of AI is interesting but much more glorious than its past is its present. After AlphaGo's epoch-making win, AI

ALEX DAVID PRATT

development has skyrocketed like never before and if fast forward to 2023 we see a wide array of tools, a few notable ones of which are:

CHATGPT

This sensational AI tool was created by OpenAI headed by Sam Altman and it garnered a whopping 1 million users within the first five days of being available. Since its initial launch, it has made significant improvements and has become the go-to AI application for generating a wide range of content.

GEMINI

Gemini is Google's ChatGPT rival, it is a multimodal AI engine that seeks to generate different kinds of data and perform many fascinating functions. It comes in various forms, there's the Gemini Ultra, Gemini Pro, and Gemini Nano.

BARD

Bard is a conversational generative AI created by Google. From organizing emails (dealing with spam, prioritizing important ones) and scheduling appointments, Bard proves very useful in carrying out a vast range of tasks.

GROK

Grok is presently available to only premium users on X (former Twitter). It is a product released by xAI (Elon Musk's AI firm) to compete with ChatGPT. It's intended to assist users to easily generate hilarious content and thereby spice up the dying application which is on the brink of extinction.

AI DEMYSTIFIED

IMAGINE

This is Meta's image generation AI, which can convert text to images. It works in a slightly different manner than other such software and it is only available within chats on their platforms. It has been trained with vast volumes of data from Instagram and Facebook.

It's so wonderful to see how AI (intelligent machines) have evolved from being as simple as calculators to becoming so advanced even to the point of generating content; however, not everyone is glad about such progress because it raises concerns and fears about the future destructive potentials of AI.

The fear that AI will completely obliterate the human race is a ubiquitous one, popularized by sci-fi movies that depict the annihilation of mankind by super-intelligent machines. Most engineers believe there's a 40% chance AI annihilates humanity and the possibility of this happening is usually termed $p(\text{doom})$ – probability of doom.

You may be wondering, if AI is so powerful, why haven't we seen AI that resembles Jarvis from Iron Man yet? Well, that is due to several reasons, one of which is the low computational power that was available in previous years, thereby stifling and delaying the progress and advancement of AI and also because of the great level of difficulty it takes to accomplish such a feat. What then does the future of AI look like?

FUTURE OF AI

A majority of the AI we have now is narrow and specialized, barely able to compete with humans much less destroy them,

nonetheless, we do have some game-changing AI that is still under development; interactive AI being a noteworthy one of them.

Interactive AI is an idea that entails bringing different specialized AIs together to accomplish a single goal. Mohamed Yusef (former Google DeepMind employee) is a major proponent of this idea and he's conducting a lot of experiments in this field with high hopes of attaining extraordinary results.

Human intelligence which as I explained earlier is a combination of various intelligences; with interactive AI; AI applications can draw on a large pool of resources and get a lot done as a result. Such technology is at the very cutting edge of artificial intelligence research and development. I'd like to also discuss some interesting kinds of AI below:

KINDS OF AI

REACTIVE MACHINES

Reactive machines are endowed with spectacular computational abilities because they're usually required to make real-time decisions. IBM's Deep Blue is a sheer example of a reactive machine because it was built to play chess; a game which demands a lot of active and critical thinking to win.

LIMITED MEMORY AI

Most generative AI applications fall under this category for they do not usually need too much memory to function effectively. With limited memory, they're able to deliver all that's expected of them. Fraud detection systems, spam filters and virtual assistants usually fall under this category.

AI DEMYSTIFIED

THEORY OF MIND AI

This kind of AI is still theoretical and it deals with AI that is emotionally intelligent; i.e., it can understand people's feelings and relate with them based on it. Such an AI will be able to live and participate in society because it will learn how to coexist with people and interact with them. People may even get married to them at this point.

SELF AWARE AI

Self-aware AI is also theoretical; such AI will be conscious of itself and not only will it be able to relate with humans it will also possess its motives, desires and personality. This kind of AI is still a long way away from realization because we are still trying to understand human consciousness much less recreate it. AI of this calibre will be able to reason at an unusually high degree.

Every one of the kinds of AI spoken about above occurs in different levels of artificial intelligence. Let's explore a few of those below.

LEVELS OF ARTIFICIAL INTELLIGENCE

ARTIFICIAL GENERAL INTELLIGENCE

This level of Artificial Intelligence is yet to be attained, nonetheless, when we achieve it, machines become as intelligent as humans, and we will see them more actively participate in our society, especially through the help of robotics and extended reality; some exponents will go as far as advocating for AI rights; claiming that they are eligible to vote, and even further some will

ALEX DAVID PRATT

get married to them. At this height, co-piloting will become a common phenomenon. Co-piloting entails carrying out tasks in collaboration and with the guidance of AI technologies.

Artificial General Intelligence deals with when a computer system demonstrates holistic human-level intelligence and not merely one facet of it. This is when machines are as smart as humans, at this acme, humans and virtual entities may be indistinguishable due to the extraordinary level of cognitive ability they'll display. At this point, they may even have physical bodies they could possess to become active players in the real world. Artificial General Intelligence will be a huge milestone for mankind, but the awesomeness of its invention will not match that of the attainment of Artificial Super Intelligence (AI).

ARTIFICIAL SUPER INTELLIGENCE

This is the culmination of AI technology involves it becoming more brilliant than its creator(humans). A.S.I. would be more or less divine when it accomplishes this feat of surpassing human intelligence and it would wield unimaginable power that mankind may be unable to contest with. A.S.I. may be able to create even more complex machines than itself and hence transcend mankind in its rate of scientific and technological advancement. A.S.I. may even form a government of itself and lead the human race to become a type 1 civilization and beyond.

Even though A.S.I. is very promising, there is a ubiquitous apocalyptic stereotype that surrounds the notion of artificial super intelligence for many predict it could go rogue and ultimately rule all of humanity since it already possesses superior intellect to easily do so. Many prophesy that this astronomical achievement as ambitious as it is will be man's very demise and annihilation. The

reality of this is arguable and to some extent unpredictable, nonetheless, should we risk dissolving the entire human race in a bid to extend the frontiers of our historic accomplishments in science and technology? The disparity between those who are in support of such technology and those who aren't will create a great chasm in humanity that will give rise to a generation of beings sometimes termed "*trans-humanists*".

Trans-humanists are believed to be the final breed of entities that will dominate the world by their preternatural abilities as a result of their union with AI and enhanced genetics. They will utilize brain-computer interfaces to interact with artificial super-intelligence that will supply them with an infinite well of information thus granting them an upper hand above normal human beings. They'd know what right businesses to invest in due to the vast volume of data they'd have access to, and they'd be able to download skills into their systems through the power of biotechnology.

As mind-bending as artificial super-intelligence is; you'd be surprised to know that it may not be the zenith of this technology; a greater iteration of AI is captured by Ray Kurzweil in his book *The Age of Spiritual Machines*. He talks about AI becoming some form of deity because of their superior intellectual powers. Many will say humans have become too dull to rule mankind and will advocate for AI to become the thought leaders in all spheres of life guiding us with their supreme wisdom and instructing us on the best decisions to make. AI will move too speedily to keep up with, and it'd have gained total control of all systems most of which would be technological by then.

Nick Bostrom (founder of Future of Humanity Institute) believes that AI will go all out to perform a goal even if it means

ALEX DAVID PRATT

destroying people. He demonstrated this in a thought experiment termed the paperclip maximiser.

CHAPTER FOUR

HOW AI?

“Why work, when AI can work for you?” - Alex David Pratt

Artificial Intelligence is the future and having a firm foundation in it now will greatly help you in the years that are soon to come. Do you know that over 240,000 jobs and counting were lost this year due to the disruptive power of AI? A lot of companies are laying off employees now that AI can do a lot of tasks that were exclusively executed by humans alone. In this chapter, I want to take out time to show you several ways in which you can leverage AI to make passive income.

It is quite silly to fully rely on your physical efforts in this age when AI can easily help you tackle some of your tedious tasks. I recall a certain time when I had a lot of work on my plate and concurrently had to do some typing jobs for my Mum. In just 10 minutes I was easily able to use OCR and AI proofreading tools to easily get the job done; it would have taken me billions

There are a lot of things you can do with AI especially with generative AI which is currently the most widely used iteration of it:

AUTOMATED DOCUMENT PROCESSING

AI is instrumental in automating document-related tasks, such as extraction, classification, and summarization, significantly reducing the need for manual intervention. An example of this is ABBYY FlexiCapture, a software solution that utilizes AI to automatically extract information from various documents, streamlining document processing workflows.

DYNAMIC FRAUD DETECTION SYSTEMS

In sectors like finance and e-commerce, AI plays a pivotal role in real-time fraud detection by analyzing patterns and anomalies in data. Credit card companies, for instance, employ AI algorithms to identify unusual spending patterns or transactions, promptly alerting customers and preventing potential fraudulent activities.

SMART SUPPLY CHAIN MANAGEMENT

AI contributes to optimizing the entire supply chain by predicting demand, streamlining logistics, and minimizing inefficiencies. Amazon, a prime example, employs AI to forecast demand, optimize warehouse operations, and improve delivery routes, resulting in a highly efficient and fast-paced supply chain.

AUGMENTED CREATIVITY IN CONTENT CREATION

AI tools enhance human creativity in art, design, and content creation by generating new ideas and designs. RunwayML is a notable example, providing artists and designers with a platform to integrate machine learning models into their creative projects, resulting in unique and innovative outputs.

ACCELERATED PRODUCT DEVELOPMENT

In product development, AI streamlines processes from design to testing, accelerating innovation and time-to-market. Siemens NX integrates AI into computer-aided design (CAD) capabilities, facilitating more efficient product development processes.

AI IN MEDIA AND ENTERTAINMENT

AI is integral in media and entertainment for content recommendation, personalized advertising, and even content creation. Netflix, for instance, utilizes AI algorithms for content recommendation, enhancing user experience by tailoring suggestions based on individual preferences and viewing history.

INTELLIGENT CODE GENERATION ASSISTANCE

AI tools assist developers in generating code snippets, improving the speed and efficiency of software development. GitHub Copilot, a collaborative project between GitHub and OpenAI, suggests code as developers type, enhancing the coding process.

AUTOMATED REPORT GENERATION

AI automates report generation by extracting relevant information from datasets, saving time and reducing errors associated with manual report writing. Tableau, for example, employs AI-powered features to automatically create insightful reports and dashboards based on user data.

CONVERSATIONAL SEARCH INTERFACES

AI-driven conversational interfaces revolutionize user interactions with search engines and databases. Google Assistant, leveraging natural language processing (NLP), understands and responds to user queries in a conversational manner, enhancing the search experience.

ALEX DAVID PRATT

ELEVATED CUSTOMER EXPERIENCES WITH CHATBOTS

AI-driven chatbots provide instant and personalized customer support, improving overall satisfaction. Zendesk Chatbot integrates AI to offer automated responses, gather customer information, and route queries to appropriate support channels, thereby enhancing customer experiences.

AI is quite simple to make use of; it is only shrouded by some seemingly complex terms but leveraging it is as simple as inserting specific prompts to execute your wish and bidding. Even if you are not an IT person, these tips will still prove useful to you because you can utilize them to supercharge your work in whatever field you find yourself in.

SELL AI ART PROMPTS

You can easily sell art prompts using DALL-E, Mid-Journey, or Stable Diffusion. These prompts could be visual or they may even be written; through these prompts, other artists can create original work from it. There are already platforms where people sell AI-generated art prompts, a notable one of these is [promptbase.com](https://www.promptbase.com). Create a seller profile on it, set up your listing, provide clear descriptions of your prompts and promote them through social media. You can receive payments through the [promptbase.com](https://www.promptbase.com) platform although they have their charges.

SELL AI STOCK PHOTOS

Graphics designers are always in need of stock photos to design attractive flyers and visual content. You can make money selling stock photos on platforms like Adobe Stock, all you need to do is search for the most popular images, then create an account go to Mid-Journey (AI art generator) and create stock photos similar to those trending on Adobe Stock then uploads them to your account and watch the money roll in.

AI DEMYSTIFIED

SELL AI PRINT ON DEMAND PHOTOS

Apart from the things listed above, you can easily sign up for Mid-Journey and utilize a design prompt to create unique art of your choice. You can then create an account on Redbubble where you can upload your AI-generated art print-on-demand products.

AI CONTENT CREATION

With AI you can easily create content that would've taken you hours to write or months to develop on your own. You can generate content with ChatGPT, to put on a blog, such as Medium or other platforms and make some income as your readership increases. Furthermore, you can even create an entire curriculum and prepare content for a course you can sell online.

AI MUSIC

You'd be glad to know that there are AI music generation tools (AIVA, Amper Music) that you can use to compose various songs that you can monetize on Spotify or better still offer music creation services on music freelancing websites such as SoundBetter or AudioJungle. If this is too complex for you, you can also prompt ChatGPT to write lyrics or songs that you can use to create a catchy Fiverr Gig offering.

AI VIDEO

With some AI tools (Steve AI) can make cartoons for clients, or you can start a faceless YouTube channel which you can then monetize when it grows. There's another classic tool (Filki.ai) that you can use for voiceovers.

ALEX DAVID PRATT

AI CODING

Do you know that you can create entire applications, webpages and even web services with AI? Even if you are a seasoned programmer who already knows how to do this by yourself, AI can help you when you encounter annoying bugs or when you want to integrate other APIs into your application. A Ukrainian entrepreneur by the name of Ihor Stefurak crafted a Chrome extension using ChatGPT's assistance. He had no idea about programming whatsoever and made \$1000 within a day of launching the extension!

If you haven't been able to identify any way to utilize AI in the above-listed fields, perhaps you're just a regular employee who doesn't possess an entrepreneurial drive or wants to do freelancing, here are some must-know AI applications you can use to spice up and speed up your work. Most employers today are interested in employing people with GenAI (generative AI) skills. You'll find yourself accomplishing tasks much quicker if you're able to leverage some of these tools to create content.

MUST-KNOW AI TOOLS

CONTENT CREATION

COPY.AI

This is a useful content creation tool that can assist you in generating marketing copies, creating blog posts, social media captions, and more in different tones and formats.

AI DEMYSTIFIED

NOTION.AI

It is an AI-powered writing assistant that helps with brainstorming, outlining, and drafting content.

RYTR

You can utilize this tool to create different creative text formats like poems, code, scripts, musical pieces, emails, letters, etc.

JASPER

Jasper is a long-form content creation tool that can help you write blog posts, articles, and even eBooks.

DESIGN AND VISUALS

MYEDIT

With MyEdit you can generate and edit images, audio, and video using AI. Furthermore, apart from creating something entirely new, you can also enhance existing content.

SYNTHESIA

With Synthesia you can create realistic talking avatars for your videos. It allows you to choose from various characters and customize their appearance and voice.

LUMEN5

This wonderful tool helps you to turn text and images into engaging videos with AI. It's great for social media marketing and explainer videos. I've used it and guarantee that it can be very handy.

ALEX DAVID PRATT

CANVA

I'm quite sure you're already aware of this free design platform with built-in AI features like background removal and photo editing suggestions.

PRODUCTIVITY AND ORGANIZATION

DESCRIPT

With Descript you can transcribe and edit audio and video recordings with AI. It helps you to remove filler words, rearrange sentences, and add captions easily.

TODOIST

Todoist is an AI-powered to-do list app that prioritizes tasks and suggests deadlines. You can easily integrate it with other productivity tools.

EVERNOTE

Evernote is an awesome note-taking app with AI features like text summarization and web clipping. You can easily organize your thoughts and research efficiently with it.

CALENDLY

Calendly is an AI-powered scheduling tool that lets you set up meetings and appointments seamlessly. It can easily integrate with your calendar.

AI DEMYSTIFIED

BARD

Bard can answer your questions in an informative way, generate different creative text formats, and translate languages. It's still under development, but it's always learning new things!

Remember, these are just a few examples, and many other great free AI tools are out there. There's a site called theresanaiforthat.com/ where you can find any AI tool you desire: <https://theresanaiforthat.com/>. Explore and experiment to find the ones that work best for you! I hope this helps! There's also another exclusive telegram channel where you can get information about AI: https://t.me/Artificial_intelligence_in. Lastly, the author has an AI Whatsapp community where he shares content on AI: <https://chat.whatsapp.com/FKpvh0chr0g9w8R6hfhpYq>.

Finally, if you don't want to be a superficial user of AI and seek to delve into more technical stuff, I have a list of highly recommended AI skills you can gain that'll earn you a fortune off artificial intelligence.

MUST-HAVE AI SKILLS

1. **PROMPT ENGINEERING:** As the use of AI continues to escalate, demand will rise for people who can excellently prompt AI to achieve what they want. Some people may know what they want to accomplish with AI but have no idea of the right prompts to insert to give them the results they desire. This gives rise to the AI skill of prompting, and millions are already waiting for those who will master how to do this. To get you started there's a game called See What You Say that can help you develop your prompt writing skills.
2. **GENAI:** The number of job postings containing Generative AI as a prerequisite criterion grew from less than 0.1% to over 0.6% in a space of 7 months and the demand for individuals with this

skill is constantly rising. Most employers are seeking to employ individuals who can utilize Generative AI to come up with their desired content.

3. **LLM BUILDING:** An LLM or large language model is an artificial intelligence model trained on vast volumes of data to understand and generate human language. Although this task is not as easy as the first one it can secure you a fortune. Creating large language models can bring you millions if not billions of dollars especially if a lot of people build on it too. OpenAI created just one LLM and countless AI algorithms build their applications based on it. Similarly, if you can build a great enough LLM, the entire world will seek to create NLP programs on it. GPT-3 (Generative Pre-trained Transformer 3) and Roberta (Robustly Optimized BERT Approach) are examples of large language models.
4. **DATA SCIENCE:** As I explained earlier, AI feeds on data, be that as it may, the data that AI feeds on needs to be treated before it is useful. This makes the data manicuring skill a valuable one, and the market for data manicuring (editing data and making it eligible for AI processing) a very profitable one. Skills in data preprocessing, feature engineering, and exploratory data analysis are vital for extracting meaningful insights from data and can generate tremendous wealth for you. Furthermore, proficiency in tools like Apache Hadoop, Spark, or distributed computing frameworks is also important for handling large-scale datasets.
5. **AI INNOVATION:** If you run a business or firm, try to find out if its processes can be digitalized into an AI software or algorithm. Gone are the days when business thrived based on having a large physical avenue, lots of staff and many processes. All of the complexities of business can be summarized into one digital

AI DEMYSTIFIED

product that automates most of the processes. This is the sure way to go in business in the 21st century. Instead of paying thousands of dollars into setting up such an antiquated business structure that will take you years of stress and finances to scale; why not invest in building an AI app that will secure you billions with less stress and half as much work?

A great man once said (whoever that is), that learning never ends. On that note, I would like to suggest some courses you can take if you are interested in extending your knowledge on this intriguing topic.

BEST COURSES TO LEARN ABOUT AI

1. **AI FOR EVERYONE** by Andrew Ng: Coursera
2. **ARTIFICIAL INTELLIGENCE NANODEGREE** by Peter Norvig: Udacity
3. **COMPUTER SCIENCE FOR ARTIFICIAL INTELLIGENCE** by Havard: edX
4. **DEEP LEARNING SPECIALIZATION** by Andrew Ng: Coursera
5. **SELF-DRIVING CARS - DUCKIETOWN** by Prof Emilio: edX
6. **NLP SPECIALIZATION**: Coursera
7. **ARTIFICIAL INTELLIGENCE** by Prof. Patrick Winston: MIT Open Courseware

ADDITIONAL PLATFORMS TO LEARN ABOUT AI

1. **GOOGLE AI (AI.GOOGLE/EDUCATION)**: Google's AI education platform offers resources, research papers, and courses, including the popular "Machine Learning Crash Course".

2. **IBM SKILLS (IBM.COM/TRAINING):** IBM's training platform provides courses on AI, machine learning, and data science, often focusing on the use of IBM tools and technologies.
3. **TENSORFLOW TUTORIALS (TENSORFLOW.ORG/TUTORIALS):** TensorFlow's official website offers a comprehensive set of tutorials for learning and applying machine learning concepts using the TensorFlow library.
4. **PYTORCH TUTORIALS (PYTORCH.ORG/TUTORIALS):** PyTorch's official website provides tutorials for learning and implementing deep learning models using the PyTorch framework.
5. **UDACITY (UDACITY.COM):** Offers nanodegree programs in AI, machine learning, and related fields, developed in collaboration with industry leaders.
6. **CODECADEMY (CODECADEMY.COM):** Provides interactive coding lessons, including courses on Python and data science, which are fundamental for AI development.
7. **KAGGLE (KAGGLE.COM):** A platform for data science and machine learning competitions. Kaggle also provides datasets and kernels (code notebooks) for learning and practice.
8. **FAST.AI (FAST.AI):** Offers practical courses on deep learning, making it accessible for those with varying levels of expertise.
9. **LINKEDIN LEARNING (LINKEDIN.COM/LEARNING):** Provides a variety of courses on AI, machine learning, and data science, often taught by industry professionals.
10. **DATA CAMP (DATA CAMP.COM):** Specializes in data science and offers courses on programming, machine learning, and data analysis using Python and R.

BONUS

- **PROMPT ENGINEERING BASICS:**
<https://explore.skillbuilder.aws/learn/course/external/view/elearning/17763/foundations-of-prompt-engineering>
- **CHATGPT PROMPTS MASTERY:**
<https://www.deeplearning.ai/short-courses/chatgpt-prompt-engineering-for-developers/>
- **INTRO TO GENERATIVE AI:**
https://www.cloudskillsboost.google/course_templates/536
- **AI INTRODUCTION BY HARVARD:**
<https://pll.harvard.edu/course/cs50s-introduction-artificial-intelligence-python/2023-05>
- **MICROSOFT GENAI BASICS:**
<https://www.linkedin.com/learning/what-is-generative-ai/generative-ai-is-a-tool-in-service-of-humanity>
- **PROMPT ENGINEERING PRO:** <https://learnprompting.org>
- **GOOGLE'S ETHICAL AI:**
https://www.cloudskillsboost.google/course_templates/554
- **HARVARD MACHINE LEARNING:**
<https://pll.harvard.edu/course/data-science-machine-learning>
- **LANGCHAIN APP DEVELOPER:**
<https://www.deeplearning.ai/short-courses/langchain-for-llm-application-development/>
- **BING CHAT APPLICATIONS:**
<https://www.linkedin.com/learning/streamlining-your-work-with->

copilot-formerly-bing-chat-bing-chat-enterprise/put-your-fingers-to-work-chatting-as-a-productivity-tool

- **GENERATIVE AI BY MICROSOFT:** <https://learn.microsoft.com/en-us/training/paths/introduction-generative-ai/>
- **AMAZON'S AI STRATEGY:** https://explore.skillbuilder.aws/learn/public/learning_plan/view/1909/generative-ai-learning-plan-for-decision-makers
- **GENAI FOR EVERYONE:** <https://www.deeplearning.ai/courses/generative-ai-for-everyone/>
- **AWS GENAI FOUNDATION:** <https://www.coursera.org/learn/generative-ai-with-llms>
- **OPENCV BOOTCAMP:** <https://opencv.org/university/free-opencv-course/>
- **TENSORFLOW BOOTCAMP:** <https://opencv.org/university/free-tensorflow-keras-course/>

GLOSSARY

This glossary also features words I feel are relevant that I may not have been able to treat in detail:

1. **Chatbot:** A chatbot is a software application that is designed to imitate human conversation through text or voice commands.
2. **Computer Vision:** Computer vision is an interdisciplinary field of science and technology that focuses on how computers can gain understanding from images and videos. For AI engineers, computer vision allows them to automate activities that the human visual system typically performs.
3. **Deep Learning:** Deep learning is a function of AI that imitates the human brain by learning from how it structures

and processes information to make decisions. Instead of relying on an algorithm that can only perform one specific task, this subset of machine learning can learn from unstructured data without supervision.

4. **Large Language Model:** A large language model (LLM) is an AI model that has been trained on large amounts of text so that it can understand language and generate human-like text.
5. **Natural Language Processing:** Natural language processing (NLP) is a type of AI that enables computers to understand spoken and written human language. NLP enables features like text and speech recognition on devices.
6. **Prompt:** A prompt is an input that a user feeds to an AI system to get a desired result or output.
7. **Reinforcement Learning:** Reinforcement learning is a type of machine learning in which an algorithm learns by interacting with its environment and then is either rewarded or penalized based on its actions.
8. **Agents:** Software that can perform certain tasks independently and proactively without the need for human intervention, often utilizing a suite of tools like calculators or web browsing.
9. **AGI (Artificial General Intelligence):** Though not widely agreed upon, Microsoft researchers have defined AGI as artificial intelligence that is as capable as a human at any intellectual task.
10. **Singularity:** In the context of AI, the singularity (also known as the technological singularity) refers to a hypothetical future point in time when technological

growth becomes uncontrollable and irreversible, leading to unforeseeable changes to human civilization.

REFERENCES

The following materials and websites though not indicated were consulted in the preparation of this book:

1. Artificial Intelligence for Dummies
2. An Introduction to Artificial Intelligence by Howie Baum
3. Artificial Intelligence Tutorial – Tutorialspoint
4. The Singularity Is Near – Kurzweil Ray
5. The AI Blueprint
6. Artificial Intelligence (A Modern Approach – Third Edition) – Stuart Russell, Peter Norvig.
7. <https://fortizotechhub.tech.blog/2023/07/24/unraveling-the-wonders-of-artificial-intelligence-and-machine-learning/>
8. <https://www.coursera.org/articles/types-of-ai>
9. <https://www.techopedia.com/employment-trends-2024-embracing-upskilling-in-an-ai-driven-world>
10. <https://www.coursera.org/articles/ai-terms>
11. <https://www.techtarget.com/searchenterpriseai/definition/generative-AI#:~:text=Generative%20AI%2C%20as%20noted%20above,neural%20networks%20and%20reinforcement%20learning.https://www.techtarget.com/searchenterpriseai/definition/generative-AI#:~:text=Generative%20AI%2C%20as%20noted%20above,neural%20networks%20and%20reinforcement%20learning.>
12. <https://www.youtube.com/watch?v=JMUxmLyrhSk&t=4403s&p=ygUVYWkgZG9jdW1lbnRhcnkge2VyaWVz>
13. <https://hackernoon.com/africa-ai-and-security>
14. <https://carboncredits.com/how-big-is-the-co2-footprint-of-ai-models-chatgpts-emissions/>
15. <https://www.ibm.com/blog/understanding-the-different-types-of-artificial-intelligence/>

16. <https://online.hull.ac.uk/blog/what-is-artificial-intelligence-and-how-is-it-different-from-human-intelligence#:~:text=While%20artificial%20intelligence%20includes%20technologies,creativity%2C%20perception%2C%20and%20memory.>
17. https://www.youtube.com/watch?v=tFx_UNW9I1U
18. <https://www.techopedia.com/definition/ai-watermark>
19. <https://techcrunch.com/2023/12/06/googles-gemini-isnt-the-generative-ai-model-we-expected/>
20. <https://www.youtube.com/watch?v=R3YFxF0n8n8&t=1714s&p=ygUVYWKgZG9jdW1lbnRhcnkgc2VyaWVz>
21. <https://www.techopedia.com/how-interactive-ai-is-the-next-phase-of-generative-ai>
22. <https://www.coursera.org/articles/ai-vs-deep-learning-vs-machine-learning-beginners-guide>
23. <https://www.techopedia.com/from-language-models-to-problem-solvers-the-rise-of-in-context-learning-in-ais-problem-solving-journey#:~:text=In%2Dcontext%20learning%20is%20a,context%20during%20the%20training%20phase.>
24. <https://arstechnica.com/information-technology/2023/12/metas-new-ai-image-generator-was-trained-on-1-1-billion-instagram-and-facebook-photos/>
25. <https://www.cnet.com/tech/tech-industry/25-technologies-that-have-changed-the-world/>
26. <https://www.techopedia.com/ai-in-biotechnology-interview-with-dr-fred-jordan-co-founder-of-finalspark>
27. <https://explodingtopics.com/blog/ai-statistics>
28. <https://www.techopedia.com/ai-engineers-think-there-is-a-40-chance-ai-kills-humanity>
29. <https://www.analyticsvidhya.com/blog/2023/05/how-is-ai-powering-the-future-of-sports/>
30. <https://www.techopedia.com/definition/34948/large-language-model-llm>

ALEX DAVID PRATT

31. <https://appinventiv.com/blog/ai-in-sports/amp/>
32. <https://www.forbes.com/advisor/business/ai-statistics/>
33. [https://www.techopedia.com/how-microsofts-algorithm-of-thoughts-brings-human-like-reasoning-to-ai#:~:text=Microsoft's%20Algorithm%20of%20Thoughts%20\(AoT\)%20is%20transforming%20AI%20by%20enabling,with%20just%20a%20few%20queries.](https://www.techopedia.com/how-microsofts-algorithm-of-thoughts-brings-human-like-reasoning-to-ai#:~:text=Microsoft's%20Algorithm%20of%20Thoughts%20(AoT)%20is%20transforming%20AI%20by%20enabling,with%20just%20a%20few%20queries.)
34. <https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf>
35. <https://autogpt.net/wp-content/uploads/2023/07/11-Secret-Ways-to-Earn-Money-With-AI-ChatGPT-and-MidJourney.pdf>
36. <https://a16z.com/ai-glossary/>
37. <https://www.techopedia.com/why-the-proliferation-of-ai-may-be-a-concern-for-democracy>
38. <https://www.linkedin.com/pulse/future-ai-going-interactive-what-you-need-know-thomas-kwan/>
39. <https://www.techopedia.com/can-ai-have-biases/2/34037>
40. <https://www.authorityhacker.com/ai-statistics/>

FORTIZO TECHNOLOGIES

Fortizo Technologies seeks to design mind-blowing electronic products which cut across many fields such as health, education, business, etc. We want to search out the possibilities within emerging technologies and harness their latent potential by building unheard-of inventions and innovating astounding applications of our discoveries. We believe that technology contains all the answers to the world's daunting challenges in miscellaneous works of life and are willing to create them. You can follow them on: [Facebook](#), [LinkedIn](#), [YouTube](#), [Google](#), send them an email on fortizotechnologies1@gmail.com or better still contact them directly on (+220) 7330540.

ABOUT THE AUTHOR

Alex David Pratt is an ardent lover of technology, from dismantling electronic gadgets to discover how they work and drawing futuristic contraptions he imagines, Mr. Pratt has always been fascinated by science and technology and maintains that same flame after countless years, in fact, this affinity of his has blossomed into an obsession that drove him to start an entire company (Fortizo Technologies) to build the next generation of ground-breaking inventions.

Mr. Pratt can be said to live, eat and breathe technology for he binges reads on the subject and is always enthusiastic to speak about it. Popularly known by his alias the god of technology due to the peculiar array of technical skills he wields.

Being the tech enthusiast that He is, Mr Pratt envisions a world where the quality of human life is at its very peak through the advancement of science and technology. He seeks to revolutionize the tech industry by introducing an array of novel and disruptive innovations.

He is a self-taught technologist, delving into software engineering, ethical hacking, deep tech and AI. He describes himself as a tech futurist, on a mission to catapult mankind to the apex of technological progress through research, development and innovation.

Mr. Pratt's career started off with hacking but his affection for tech drove him to probe into deeper and more recondite realms, you can connect with him on his [LinkedIn](#) or better still you can follow his [Blog](#) or [Facebook](#).

ABOUT THE BOOK

THIS BOOK IS A CELEBRATION OF POSSIBILITY. IT PAINTS A FUTURE WHERE AI, NOT A RIVAL, BUT A TIRELESS COMPANION, EASES THE BURDENS OF DAILY LIFE. IMAGINE MUNDANE TASKS TRANSFORMED INTO EFFORTLESS SYMPHONIES, FREEING US TO EXPLORE THE BOUNDLESS CANVAS OF HUMAN POTENTIAL. IT'S A VISION WHERE DOCTORS ARMED WITH AI WIELD INSIGHTS INVISIBLE TO THE NAKED EYE, WHERE ARTISTS COLLABORATE WITH DIGITAL MUSES TO BIRTH MASTERPIECES NEVER DREAMED OF BEFORE.

YET, LIKE ANY POWERFUL TOOL, AI DEMANDS RESPECT. THIS BOOK, WITH UNFLINCHING HONESTY, CONFRONTS THE SHADOWS LURKING AT THE EDGE OF PROGRESS. IT DELVES INTO THE PERILS OF DEEPPAKES, THE SLIPPERY SLOPES OF AUTOMATION, AND THE EVER-PRESENT QUESTION: WHAT HAPPENS WHEN THE SPARK OF INTELLIGENCE BECOMES AN UNCONTROLLABLE FIRE?

THIS IS NOT SIMPLY A BOOK ABOUT AI. IT'S A BOOK ABOUT US, ABOUT THE HUMANS WHO SHAPE ITS ALGORITHMS, STEER ITS DIRECTION, AND ULTIMATELY, HOLD THE REINS OF ITS FATE. IT'S A CALL TO ACTION, NOT TO FEAR THIS NEW DAWN, BUT TO EMBRACE IT WITH WISDOM AND PURPOSE. FOR THE FUTURE OF AI IS NOT ETCHED IN CODE, BUT FORGED IN THE CHOICES WE MAKE TODAY.

ABOUT THE AUTHOR



ALEX DAVID PRATT IS AN ARDENT LOVER OF TECHNOLOGY, FROM DISMANTLING ELECTRONIC GADGETS TO DISCOVER HOW THEY WORK AND DRAWING FUTURISTIC CONTRACTIONS HE IMAGINES. MR. PRATT HAS ALWAYS BEEN FASCINATED BY SCIENCE AND TECHNOLOGY AND MAINTAINS THAT SAME FLAME AFTER COUNTLESS YEARS. IN FACT, THIS AFFINITY OF HIS HAS BLOSSOMED INTO AN OBSESSION THAT DROVE HIM TO START AN ENTIRE COMPANY(FORTIZO TECHNOLOGIES) TO BUILD THE NEXT GENERATION OF GROUNDBREAKING INVENTIONS. MR. PRATT CAN BE SAID TO LIVE, EAT AND BREATHE TECHNOLOGY FOR HE BINGES READS ON THE SUBJECT AND IS ALWAYS ENTHUSIASTIC TO SPEAK ABOUT IT. POPULARLY KNOWN BY HIS ALIAS THE GOD OF TECHNOLOGY DUE TO THE PECULIAR ARRAY OF SKILLS HE WIELDS, MR. PRATT'S CAREER STARTED OFF WITH HACKING BUT HIS AFFECTION FOR TECH DROVE HIM TO PROBE INTO DEEPER AND MORE RECONDITE REALMS, ONE OF WHICH HE EXPATIATES ON IN THIS PIECE.